



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/893,522

06/29/2001

George Hoshi

010846

2987

23850 7590 12/23/2011
KRATZ, QUINTOS & HANSON, LLP
1420 K Street, N.W.
4th Floor
WASHINGTON, DC 20005

EXAMINER

FOX, JOHN C

ART UNIT

PAPER NUMBER

3753

MAIL DATE

DELIVERY MODE

12/23/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/893,522	HOSHI ET AL.	
	Examiner	Art Unit	
	JOHN FOX	3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1-4 and 35-48 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-4 and 35-48 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1 and 35/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (US 6,076,543).

Johnson shows a gas line slidably mounted on a rail 42, see Figure 2, a plurality of gas lines mounted in parallel in a vented enclosure, see Figure 10, and discloses at column 12, lines 18-29, that if the enclosure of Figure 10 is not required then the plurality of gas sticks can be "adjustably mounted on a pair of rails or supports that are coupled between adjacent stanchions 116. Each rail extends transverse to the long axis of device's track and includes a mount or bolt which extends therefrom for insertion through a respective one of the track 42's slots 71."

Johnson teaches headed bolts 76 for use with the rails, or tracks, 42, see Figures 6-7. The heads 78 of the bolts are captured in the interior region 72 of the channels 68 by the flanges 74 and the heads 78 can slide in the channels 68 to position the bolts at a desired location for securing the fluid handling components mounted on the rails 42.

Johnson teaches that "Gas handling units 44-48 are slidably and adjustably mounted on track 42", see column 5, lines 37-38 (emphasis added). Gas handling units 44-48 make up a gas line, as recited in the claims. Such gas lines are commonly referred to as gas sticks.

However, Johnson does not disclose that the gas lines are slidably mounted on the transverse rails, only that they are adjustably mounted on the transverse rails. Johnson teaches rails 42 for adjustably mounting components. It would have been

Art Unit: 3753

obvious at the time the invention was made for one of ordinary skill in the art to have used such rails 42 for the disclosed transverse rails in view of the readily apparent utility of the rails 42 for adjustably mounting the gas lines. It would have been obvious at the time the invention was made for one of ordinary skill in the art to have used the headed fasteners 76 with the rails to so attach the gas line rails to the transverse rails. The use of such rails 42 would satisfy the disclosed function of Johnson of adjustably mounting the gas lines on the transverse rails and would inherently and explicitly provide for slidable adjustability. It is believed that a routineer in the art would readily recognize that the threaded portion 80 of the fasteners 76 would be disposed in the slots 71 for attaching the gas stick rails to the transverse rails, as disclosed by Johnson.

Applicant's arguments filed November 22, 2011 have been fully considered but they are not persuasive. Applicant argues that there are substantial, important differences between the art and the claimed combination, in particular that Johnson, as modified, would not provide for the line supporting rails being slidable relative to other line supporting rails. However, the proposed modification of Johnson is 100% identical, in every respect, to the claimed combination. In particular, when the gas lines are mounted on transverse rails 42 they will be slidably mounted and so slidable with respect to any other gas lines present.

Claims 1 and 35/1, in the alternative, and claims 2-4, 35/2-4, 37-42, and 44-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson as modified above in view of Itoh et al. Johnson, as modified, shows the claimed device except uses tubing connected fluid handling devices. Itoh et al show an improvement over

Art Unit: 3753

tubing connected fluid handling devices with coupling blocks 21 for mounting the fluid handling devices. It would have been obvious for one of ordinary skill in the art at the time the invention was made to have configured the Johnson gas line from such modular components as taught by Itoh et al to reduce costs, for example, and increase productivity. The provision of a spare rail for future use is considered to be an obvious expedient, in view of the spare line provided in Figure 10 of Johnson, note spare connection 110. Assembling a system as recited in the claims is seen to be an obvious step.

Applicant's arguments filed November 22, 2011 have been fully considered but they are not persuasive. Applicant argues that there are substantial, important differences between the art and the claimed combination, in particular that Johnson, as modified, would not provide for the line supporting rails being slidable relative to other line supporting rails. However, the proposed modification of Johnson is 100% identical, in every respect, to the claimed combination. In particular, when the gas lines are mounted on transverse rails 42 they will be slidably mounted and so slidable with respect to any other gas lines present.

Claims 36 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Itoh et al as applied above and further in view of Markulec et al.

Johnson, as modified, shows the claimed device except for the shape of the tracks. Markulec et al show a gas stick system with a downward tapered groove and nut, see Figure 6a. It would have been obvious for one of ordinary skill in the art at the time the invention was made to have used such a downward tapered groove and nut in

Art Unit: 3753

the system of Johnson, as modified, in view of the readily apparent equivalence between the two tracks and under the rationale set forth in *KSR v. Teleflex*, U.S.____, 127 S. Ct. 1727, 82 U.S.P.Q. 2d 1835 (2007) that the simple substitution of one known element for another to obtain predictable results is an indication of obviousness. In this case the predictable result is a rail for mounting a gas stick.

Applicant's arguments filed November 22, 2011 have been fully considered but they are not persuasive. Applicant argues that there are substantial, important differences between the art and the claimed combination, in particular that Johnson, as modified, would not provide for the line supporting rails being slidable relative to other line supporting rails. However, the proposed modification of Johnson is 100% identical, in every respect, to the claimed combination. In particular, when the gas lines are mounted on transverse rails 42 they will be slidably mounted and so slidable with respect to any other gas lines present.

Claims 1 and 35/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Vu et al (US 6,394,138), of record.

Johnson shows a gas line slidably mounted on a rail 42, see Figure 2, a plurality of gas lines mounted in parallel in a vented enclosure, see Figure 10, and discloses at column 12, lines 18-29, that if the enclosure of Figure 10 is not required then the plurality of gas sticks can be “adjustably mounted on a pair of rails or supports that are coupled between adjacent stanchions 116. Each rail extends transverse to the long axis of device’s track and includes a mount or bolt which extends therefrom for insertion through a respective one of the track 42’s slots 71.”

However, Johnson does not disclose that the gas lines are slidably mounted on the transverse rails. Vu et al show a gas stick system where gas sticks are mounted on transverse rails 234 by nuts 242 slidable in the rails and secured by bolts 240, see Figure 12. It is inherent to such rails that the mounted components can be slidably adjusted prior to the bolts 242 being fully tightened. It would have been obvious at the time the invention was made for one of ordinary skill in the art to have used such rails as taught by Vu et al with the system of Johnson to provide support for the gas sticks thereof.

Applicant's arguments filed November 22, 2011 have been fully considered but they are not persuasive.

Applicant argues that Johnson shows a support in Figure 10 so there is no reason to combine Johnson with Vu et al. However, Johnson discloses that the support shown in Figure 10 is not needed in some applications in which case transverse rails may be used. Vu et al show a useful embodiment of such transverse rails.

Applicant argues that there are substantial, important differences between the art and the claimed combination, in particular that Johnson, as modified, would not provide for the line supporting rails being slidable relative to other line supporting rails. However, the proposed modification of Johnson is 100% identical, in every respect, to the claimed combination. In particular, when the gas lines are mounted on transverse rails 234 they will be slidably mounted and so slidable with respect to any other gas lines present.

Claims 1 and 35/1, in the alternative, and claims 2-4, 35/2-4, 37-42, and 44-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Vu

Art Unit: 3753

et al as applied above and further in view of Itoh et al. Johnson, as modified, shows the claimed device except uses tubing connected fluid handling devices. Itoh et al show an improvement over tubing connected fluid handling devices with coupling blocks 21 for mounting the fluid handling devices. It would have been obvious for one of ordinary skill in the art at the time the invention was made to have configured the Johnson gas line from such modular components as taught by Itoh et al to reduce costs, for example, and increase productivity. The provision of a spare rail for future use is considered to be an obvious expedient, in view of the spare line provided in Figure 10 of Johnson, note spare connection 110. Assembling a system as recited in the claims is seen to be an obvious step.

Applicant's arguments filed November 22, 2011 have been fully considered but they are not persuasive.

Applicant argues that Johnson shows a support in Figure 10 so there is no reason to combine Johnson with Vu et al. However, Johnson discloses that the support shown in Figure 10 is not needed in some applications in which case transverse rails may be used. Vu et al show a useful embodiment of such transverse rails.

Applicant argues that there are substantial, important differences between the art and the claimed combination, in particular that Johnson, as modified, would not provide for the line supporting rails being slidable relative to other line supporting rails. However, the proposed modification of Johnson is 100% identical, in every respect, to the claimed combination. In particular, when the gas lines are mounted on transverse rails 234 they will be slidably mounted and so slidable with respect to any other gas lines present.

Art Unit: 3753

Claims 36 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Vu et al and Itoh et al as applied above and further in view of Markulec et al.

Johnson, as modified, shows the claimed device except for the shape of the tracks. Markulec et al show a gas stick system with a downward tapered groove and nut, see Figure 6a. It would have been obvious for one of ordinary skill in the art at the time the invention was made to have used such a downward tapered groove and nut in the system of Johnson, as modified, in view of the readily apparent equivalence between the two tracks and under the rationale set forth in *KSR v. Teleflex*, U.S.____, 127 S. Ct. 1727, 82 U.S.P.Q. 2d 1835 (2007) that the simple substitution of one known element for another to obtain predictable results is an indication of obviousness. In this case the predictable result is a rail for mounting a gas stick.

Applicant's arguments filed November 22, 2011 have been fully considered but they are not persuasive.

Applicant argues that Johnson shows a support in Figure 10 so there is no reason to combine Johnson with Vu et al. However, Johnson discloses that the support shown in Figure 10 is not needed in some applications in which case transverse rails may be used. Vu et al show a useful embodiment of such transverse rails.

Applicant argues that there are substantial, important differences between the art and the claimed combination, in particular that Johnson, as modified, would not provide for the line supporting rails being slidable relative to other line supporting rails. However, the proposed modification of Johnson is 100% identical, in every respect, to the claimed

Art Unit: 3753

combination. In particular, when the gas lines are mounted on transverse rails 234 they will be slidably mounted and so slidable with respect to any other gas lines present.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN FOX whose telephone number is (571)272-4912. The examiner can normally be reached on Monday-Saturday from 10am-6pm (Hoteling Program).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hepperle can be reached on 571-272-4913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3753

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John Fox/
Primary Examiner
Art Unit 3753